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## **CLAIMS**

- 1. Genes which code for glycosyl hydrolases having an HCA score with the iota-carrageenase of *Alteromonas fortis* which is greater than or equal to 65% over the domain extending between amino acids 164 and 311 of the protein sequence SEQ ID No. 2 of said iota-carrageenase.
- 2. Genes according to claim 1 wherein the HCA score is greater than or equal to 70%.
- 3. Genes according to claim 1 wherein the HCA score is greater than or equal to 75%.
  - 4. Gene according to claim 1 which codes for the 1-carrageenase of Alteromonas fortis and comprises the nucleic acid sequence SEQ ID No. 1.
  - 5. Genes which code for glycosyl hydrolases having an HCA score with the kappa-carrageenase of *Alteromonas carrageenovora* which is greater than or equal to 75% over the domain extending between amino acids 117 and 262 of the protein sequence SEQ ID No. 6 of said kappa-carrageenase.
  - 6. Genes according to claim 5 wherein the HCA score is greater than or equal to 80%.
  - 7. Genes according to claim 5 wherein the HCA score is greater than or equal to 85%.
  - 8. Gene according to claim 5 which codes for the  $\kappa$ -carrageenase of *Cytophaga drobachiensis* and comprises the nucleic acid sequence SEO ID No. 7.
  - 9. Use of the genes according to any one of claims 1 to 8 for obtaining glycosyl hydrolases by genetic engineering.
- 25 10. Use of the gene according to claim 4 for obtaining the iota-carrageenase of *Alteromonas fortis* by genetic engineering.
  - 11. Use of the gene according to claim 8 for obtaining the kappa-carrageenase of *Cytophaga drobachiensis* by genetic engineering.